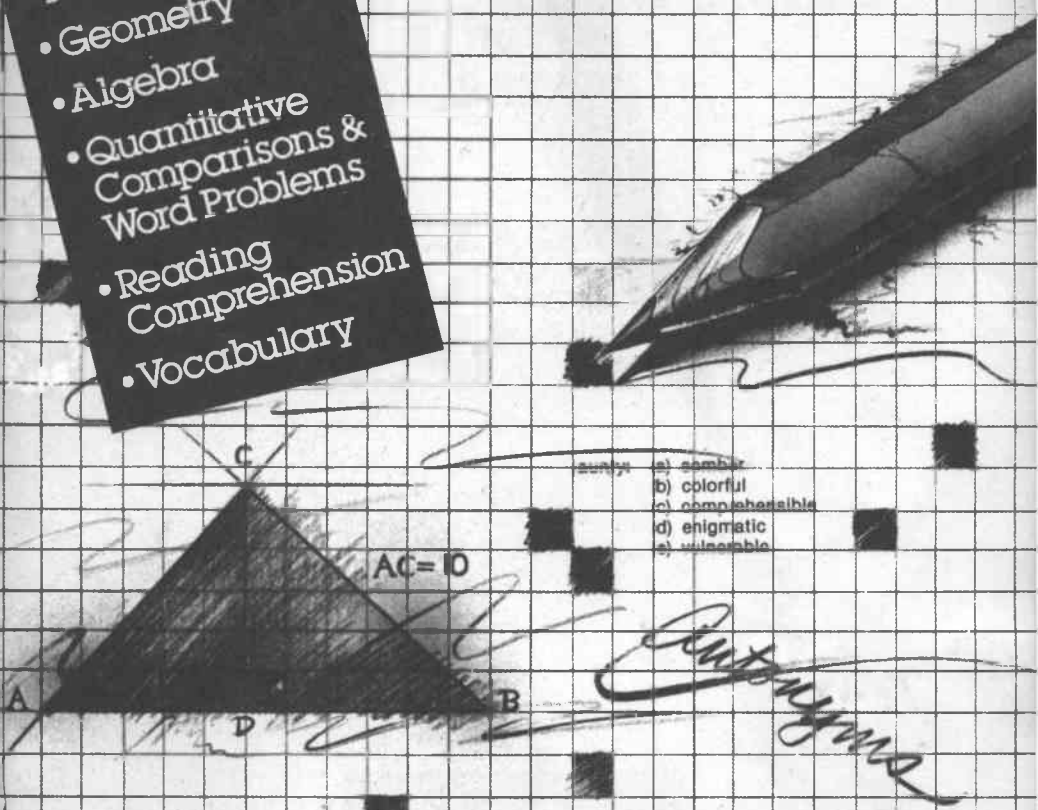
HAYDEN SOFTWARE

SCORE IMPROVEMENT SYSTEM FOR THE SAT*

- Practice Tests
- Geometry
- Algebra
- Quantitative Comparisons & Word Problems
- Reading Comprehension
- Vocabulary



PREPARE NOW!

BY ARROW INSTRUCTIONAL SYSTEMS, INC.

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HAYDEN
SCORE IMPROVEMENT SYSTEM
FOR THE
SAT*

USER'S GUIDE

By Arrow Instructional Systems, Inc.

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INTRODUCTION

Welcome to the HAYDEN SCORE IMPROVEMENT SYSTEM FOR THE SAT. This is an effective tool to begin your preparation for the Scholastic Aptitude Test. The system is easy to operate so that you can concentrate on its content. All of the information you need to complete examples or answer test questions appears on-screen, as do instructions for moving from one part of the program to another. More detailed explanations follow in this manual. You can also read the instructions on-screen by selecting the System User's Guide option after you load the program.

The HAYDEN SCORE IMPROVEMENT SYSTEM FOR THE SAT consists of three modules: **Practice Tests, Math** and **Verbal,** which are available individually or as a complete package. The Practice Tests module contains a diagnostic Pre-Test and two simulated SAT exams. The Math and Verbal are Review Modules which provide instruction and practice in solving the entire range of problems of the types found on the SAT.

This manual covers all the available modules in the HAYDEN SCORE IMPROVEMENT SYSTEM. It is organized into directions on **Using the Practice Tests Module** and **Using the Math and Verbal Review Modules.** For a more detailed explanation of the contents of each module, see **Organization of the HAYDEN SCORE IMPROVEMENT SYSTEM** in this manual.

In addition, this manual contains two sections to aid you in your preparation. **An Analysis of the SAT** gives you insight into the workings of the actual exam, its organization and scoring. **Power Testing** suggests test-taking strategies and tips for raising your scores.

ORGANIZATION OF THE HAYDEN SCORE IMPROVEMENT SYSTEM FOR THE SAT

The HAYDEN SCORE IMPROVEMENT SYSTEM is organized into three modules: **Practice Tests, Math Review** and **Verbal Review.** They are available separately or as a complete package.

PRACTICE TESTS MODULE

The PRACTICE TESTS MODULE contains an on-screen version of the Analysis of the SAT found in this manual, plus a Pre-Test and two Practice Tests, as described below.

The **Pre-Test** is a diagnostic-prescriptive tool for determining your strengths and weaknesses in the areas covered by the Mathematical and Verbal sections of the SAT. It is a two-hour test consisting of the same type of Math and Verbal questions found on an actual SAT. After you complete the test your computer will provide scores in each of sixteen subjects which contribute to your Math and Verbal scores. This profile of your performance indicates which Review Modules in the HAYDEN SCORE IMPROVEMENT SYSTEM will be useful in your preparation.

The **Practice Tests** are two-hour simulated exams with complete Mathematical and Verbal sections timed and formatted to be representative of the latest SATs and scored on the SAT scale. After reviewing your weak areas, take these Practice Tests to see how your performance would measure up on the actual exam.

MATH MODULE

The MATH REVIEW MODULE provides tutorials, drill and analysis for the mathematical areas covered on recent SAT exams.

The **Algebra Section** provides instruction and practice in solving the entire range of algebra problems of the types found on the SAT — linear and literal equations, systems of linear equations, quadratic and radical equations, and reducing fractions.

The **Geometry Section** provides instruction and practice in solving problems involving angle sums, equality of angles and sides of triangles, parallel lines, angles of a circle, the Pythagorean Theorem, special triangles, perimeters, areas and volumes. All figures needed to solve the problems are illustrated on the screen.

The **Quantitative Comparisons and Word Problems Section** covers the remaining areas in the Mathematical Section of the SAT. Quantitative comparison problems — problems that emphasize reasoning skills used to determine which of two quantities is larger — improve skills in algebra and geometry as well as in other areas of mathematics. The other problems in this section include fractions and decimals, percentages, ratios and proportions, sequences, graphs, and word problems including motion, mixture, and business and work problems.

VERBAL MODULE

The VERBAL REVIEW MODULE provides tutorials, drill and analysis for the verbal areas covered on recent SAT exams.

The **Vocabulary Section** provides a thorough review of antonyms, analogies and sentence completions, as well as an on-screen dictionary with 1000 words.

The **Reading Comprehension Section** offers strategies and practice in reading passages and responding to questions about the material just read. Working with passages drawn from the most up-to-date sources in a variety of fields will help you improve your ability to determine main ideas, to recognize logical implications and to extract factual information from what you read.

USING THE PRACTICE TESTS MODULE

Menus

After you have loaded the HAYDEN SCORE IMPROVEMENT SYSTEM **Program Disk** (see loading instructions card), you will see the **Main Menu.** The first option, **A.**, will be an on-screen version of the **System User's Guide,** which contains the same directions on using the program found in this manual. The second option, **B. An Analysis of the SAT,** also appears in this manual. It gives you insight into the workings of the actual exam, its organization and scoring.

The Main Menu lets you move easily from one section of the program to another. Simply press the key corresponding to the letter next to the section you wish to see.

Main Menu

A. System User's Guide
B. An Analysis of the SAT
C. Pre-Test
D. Practice Tests

When you select the Pre-Test or one of the Practice Tests, a **Test Detail Menu** will be displayed, listing the following sections:

Test Detail Menu

A. Complete Test
B. Start With Section 1 — Verbal
C. Start With Section 2 — Mathematical
D. Start With Section 3 — Verbal
E. Start With Section 4 — Mathematical

You may opt to take the complete test (all sections in sequence) or any individual test section.

After you make a selection, the system will provide you with all the information necessary to take the selected test.

Function Keys

A function key is a key which has a specific effect on the program's operation each time it is pressed.

Whenever a menu is on your screen, the following function keys are operational: **M** (Main Menu), **P** (Prior Menu) and **Q** (Quit). Pressing "M" always brings you back to the Main Menu. Pressing "P" causes the prior menu to be displayed. Pressing "Q" causes the computer to ask if you really want to quit. Answering **Y** (Yes) ends the program. If you answer **N** (No), you may continue where you left off.

While text (either instructions or test material) is on the screen, pressing **R** restarts the section (erasing any previous answers you may have entered), pressing **M** takes you to the last menu displayed and pressing **Q** enables you to quit.

The **left-arrow key** lets you page backward through the text one screen at a time until the first screen of the section is reached. When a question appears on the screen, your previous answer, if any, is shown. You can replace that answer by entering another one, or you can leave your answer undisturbed by pressing the left-arrow again.

Pressing the letter **O** leaves the current question temporarily unanswered and displays the next question. At the end of the test section you have a chance to review all the unanswered questions.

While you are answering Reading Comprehension questions, you can re-read the current passage without losing your place in the questions by pressing **P.**

Taking a Test

Each test is divided into four 30-minute sections. If you do not have time to take an entire test in one sitting, you may take the test one or more sections at a time. After you choose to take either the Pre-Test or a Practice Test, the Test Detail Menu is displayed. You have the option to take the complete test or to start at the beginning of one of the four sections.

At the end of each test section you may stop the test by pressing **S.** If you are taking the Pre-Test and choose to stop, the Pre-Test Section Menu will appear. To see a subject-by-subject analysis of your test results for that section, select **C. Evaluating Pre-Test Performance.**

If you decide to stop after a section of one of the Practice Tests, the computer will score the number of Verbal and Mathematical questions answered correctly and incorrectly. Write these numbers down and save them. You will need them after you have completed all four sections so that the computer can calculate your raw scores and your SAT equivalent scores. If you take a complete Practice Test, your computer will automatically calculate your raw scores and SAT equivalent scores.

If you complete all the questions in a section of the Pre-Test or a Practice Test before 30 minutes have elapsed, the computer will give you the option to review the entire section, review only the unanswered questions, start the next test section or stop the test.

When you choose to review the entire section each question will be displayed with your previous answer. To keep that answer, press that letter again. To change your answer, press the letter that corresponds to your new answer. To "erase" an answer and leave it blank, press the letter **O**.

If you elect to review only the unanswered questions, only those questions which you left unanswered by pressing **O** will be presented. As you review, you have the opportunity to answer them.

When all the appropriate questions have been reviewed, you will again have the option to review the entire section, review the unanswered questions, start the next section or stop the test. This cycle repeats until time runs out or you choose to start the next section.

Using Pre-Test Scores

The profile of your Pre-Test performance is the key to planning your review for the actual SATs. Refer to "Organization of the HAYDEN SCORE IMPROVEMENT SYSTEM" to determine which Review Modules you need to study. For most efficient preparation, concentrate review on your weaker areas.

You will want to take advantage of two features of the Review Modules: Examples With Tutormode and Examples Without Tutormode. After you answer a sample question in Examples With Tutormode, the system provides a step-by-step explanation of how to arrive at the correct answer. In Examples Without Tutormode you are simply shown which answer is correct.

If you answered at least 80% of the questions in a subject correctly, you may elect to skip review for that subject, and spend the time saved in an area which needs more work.

For subjects in which you answered between half and 80% of the questions correctly, at a minimum you will want to practice the Examples Without Tutormode section of the appropriate Review Module. Working through Examples With Tutormode will further improve your understanding of the subject.

For subjects in which you answered less than half of the questions correctly you will benefit from first working on Examples With Tutormode and then practicing Examples Without Tutormode. Your teacher may recommend additional practice material. If time permits, review all the subject material in the HAYDEN SCORE IMPROVEMENT SYSTEM Review Module covering your weak areas a second time.

Computing Practice Test Results

After you have completed all four sections of a Practice Test, choose **D. Practice Test Scores** from the Practice Tests Section Menu. You will be prompted to enter the scores you wrote down after each section. On paper, total the number of Verbal questions correct and incorrect for all of the test sections except the one you have just completed, as the totals for that section are already in the computer's memory. Next, total the number of Mathematical questions correct and incorrect.

Your computer will prompt you to enter these four totals (Verbal questions correct, Verbal questions incorrect, Mathematical questions correct and Mathematical questions incorrect). Press **ENTER** or **RETURN** after entering each one. Then press **ENTER** or **RETURN** after entering the last total, and the computer will calculate your Verbal and Mathematical raw scores and SAT equivalent scores. The "Time remaining" figures will be accurate only if you took the test in one sitting.

Remember, if you take a complete Practice Test in one sitting, your computer will automatically calculate your raw scores and SAT equivalent scores.

USING THE MATH AND VERBAL REVIEW MODULES

MENUS

After you have loaded the HAYDEN SCORE IMPROVEMENT SYSTEM **Program Disk** (see loading instructions card), you will see the **Main Menu.** The first option, **A.**, will always be an on-screen **System User's Guide** which contains the same directions found in this manual. The Main Menu lets you move easily from one section of the program to another. Simply press the key corresponding to the letter next to the section you wish to see.

When you select a section other than the System User's Guide from the Main Menu, a **Detail Menu** will be displayed, listing the options available in that section:

Detail Menu

A. Definitions, Analysis and Strategies
B. Examples With Tutormode
C. Examples Without Tutormode

Definitions, Analysis and Strategies should be reviewed before tackling the kind of questions the subject covers. First, background information on each question type is presented, then methods for answering these questions, including valuable tricks and shortcuts, are demonstrated.

Examples With Tutormode is the core of the HAYDEN SCORE IMPROVEMENT SYSTEM. This option gives you a detailed, step-by-step explanation of how to arrive at the correct answer to each question. By reviewing and practicing, you develop more efficient problem-solving techniques.

Examples Without Tutormode provides quick drill and practice in areas where you are already strong so that you can improve speed and accuracy. If you answer incorrectly, you are shown the correct answer, but no detailed explanation is provided. At the end of the section, the computer tallies the number of questions answered correctly and incorrectly, providing an indication of how well you have mastered the subject.

After you make a selection, the system will provide you with all the information necessary to continue.

NOTE: The Geometry Section combines Definitions, Analysis and Strategies with Examples With Tutormode.

Function Keys

A function key is a key which has a specific effect on the program's operation each time it is pressed.

Whenever a menu is on your screen the following function keys are operational: **M** (Main Menu), **P** (Prior Menu) and **Q** (Quit). Pressing "M" always brings you back to the Main Menu. Pressing "P" causes the prior menu to be displayed. Pressing "Q" causes the computer to ask if you really want to quit. Answering **Y** (Yes) ends the program. If you answer **N** (No), you may continue where you left off.

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The **left-arrow key** lets you page backward through the text one screen at a time until the first screen of the section is reached. When a question appears on the screen, your previous answer, if any, is shown. You can replace that answer by entering another one, or you can leave your answer undisturbed by pressing the left-arrow again.

Pressing the letter **O** leaves the current question temporarily unanswered and displays the next question. At the end of the test section you have a chance to review all the unanswered questions.

While you are answering Reading Comprehension questions, you can re-read the current passage without losing your place in the questions by pressing **P**.

AN ANALYSIS OF THE SCHOLASTIC APTITUDE TEST

OVERVIEW OF THE SAT

The SAT is an exam which attempts to measure your potential to do college level work. Both Verbal and Mathematical skills are tested during a three-hour exam which is usually administered between 9:00 A.M. and 12:00 Noon on specified Saturdays.

The exam is normally divided into six sections at the end of which you will be told to stop work. You will not be permitted to return to an earlier section after the time limit has elapsed.

The Mathematical sections measure problem-solving abilities involving arithmetic, algebra and geometry. The Verbal sections measure understanding of word relationships as well as vocabulary and reading passages of varying difficulty. Both sections require an ability to reason logically, understand basic ideas and grasp essential details.

SAT FORMAT

The usual three-hour test period is divided into six 30-minute sections: some Verbal, some Mathematical and the TSWE (Test of Standard Written English) section which is used by college placement officers. The TSWE is not computed in either the Verbal or Mathematical score. In the HAYDEN SCORE IMPROVEMENT SYSTEM you will not be concerned with the TSWE.

The six 30-minute sections normally contained in the test book are as follows:

1. **VERBAL SECTIONS:** two 30-minute sections with a total of 85 questions;

2. **MATHEMATICAL SECTIONS:** two 30-minute sections with a total of 60 questions;

3. **TEST OF STANDARD WRITTEN ENGLISH:** one 30-minute section with 50 questions;

4. **EXPERIMENTAL SECTION:** one 30-minute section (either Verbal, Mathematical or TSWE).

Only the Mathematical and Verbal sections count towards your SAT score, though you will not be told which section is experimental. The TSWE and Experimental sections are used for college placement and test control and are not included in your SAT score.

RECORDING ANSWERS

Each section of the SAT is preceded by a separate set of directions. Read the directions carefully to make sure you understand what you are being asked to do.

Here is an example of a set of directions similar to those you find in the actual exam.

Directions: Each question below consists of a related pair of words or phrases, followed by five lettered pairs of words or phrases. Select the lettered pair that BEST expresses a relationship similar to that expressed in the original pair.

Example:

PRONG:FORK:: (a) headlight:lamp
(b) cylinder:motor
(c) knife:edge
(d) illustration:book
(e) fence:house

(a) (b) (c) (d) (e)

Darken the letter of your choice. (In this example, (b) cylinder:motor is the correct choice.)

When recording your choice, avoid any stray marks on the answer grid. Such marks could invalidate an otherwise correct choice.

SAT SCORING

Your answer sheet is evaluated by a scanning machine and the spaces blackened for each question are recorded on a computer tape.

The computer compares your answers with the correct responses to calculate your raw score. Each correct answer is worth one point. Questions omitted do not count toward your score. For incorrect answers, fractions of points are deducted: 1/4 point for questions with five choices, and 1/3 point for questions with four choices. Therefore, you should avoid random guessing. However, when you are able to reduce your choices to two, most educators advise you to guess.

The following conversion chart shows how raw scores are then converted into SAT scaled scores ranging from 200 to 800. The HAYDEN SCORE IMPROVEMENT SYSTEM utilizes this chart to calculate your SAT equivalent scores.

CONVERSION CHART

RAW SCORES TO COLLEGE BOARD SCORES

Raw Score	Verbal Section	Raw Score	Verbal Section
85	800	40	470
80	760	35	430
75	720	30	400
70	680	25	360
65	640	20	330
60	600	15	290
55	570	10	260
50	540	5	220
45	500	0	200

Raw Score	Mathematical Section	Raw Score	Mathematical Section
60	800	25	480
55	750	20	440
50	700	15	390
45	650	10	350
40	620	5	300
35	570	0	250
30	520		

Your performance is compared with the performances of other students in the country. Approximately two-thirds of the students who take the SAT score between 400 and 600 on each of the tests.

The score required for admittance to a particular college or university is not fixed. No minimum score represents automatic admission.

BEST SAT PREPARATION

If you practice the skills necessary to do well on the SAT, study the examination format, and learn to work within the prescribed time limit set for the exam, you can achieve higher scores and greater confidence in test-taking.

The HAYDEN SCORE IMPROVEMENT SYSTEM is designed to help prepare you to take the SAT in an intelligent manner. It will help you to work within the three-hour allotted time for the exam and will permit you to enter the exam room with a sense of ease, confidence and preparedness.

For more tips on how to use the HAYDEN SCORE IMPROVEMENT SYSTEM most effectively to obtain your highest possible score on the SAT, refer to the **Power Testing** section of this manual.

POWER TESTING

STRATEGIES FOR SUCCESS: PREPARING FOR THE SAT USING THE HAYDEN SCORE IMPROVEMENT SYSTEM

As you know, the results of the Scholastic Aptitude Tests are crucially important to everyone who is applying to colleges and universities. In many cases, your results on these tests are the only way admissions offices have of comparing you to students from other high schools.

Along with your high school record, your SAT results will form the criteria by which your applications for admissions will be judged. This is especially true when applying to special programs.

Your purchase of the HAYDEN SCORE IMPROVEMENT SYSTEM FOR THE SAT indicates that you recognize the importance of the SAT and that you are serious about improving your scores. This section will describe and explain specific strategies for you to use in conjunction with your Hayden System in your effort to achieve your highest possible scores on the SAT.

PROBLEMS ENCOUNTERED/ PROBLEMS SOLVED

When students take the SAT without proper preparation, they encounter problems which prevent them from doing their best. Here are the four major problems students encounter on the SAT:

1. Unfamiliar Questions
2. Time Management
3. Guessing Factor Confusion
4. Self-Conscious Panic

While the well-prepared student can minimize each of these problems, the unprepared or poorly prepared student is left to struggle as best as he can and is often completely overwhelmed. Let us look at each of these problems so as to better understand them and thereby lessen their impact.

1. Unfamiliar Questions

The overwhelming majority of questions on the SAT are based on common academic experience. The mathematics questions require knowledge of only the more basic topics in arithmetic, algebra and geometry. Most students taking the SAT have a background in all these areas but still have trouble with the test. This problem occurs because the SAT questions are usually phrased in unfamiliar, non-traditional ways. It is a test designed to measure your ability to use familiar facts and procedures to answer unfamiliar types of questions. Similarly, the student who is accustomed only to traditional vocabulary workbooks and texts will find the complex analogy and sentence completion questions of the SAT confusing and frightening.

By allowing adequate preparation time in the weeks before the test and by following a well planned course of study you can prepare yourself for the untraditional, sometimes exotic questions which occur on the SAT. The more carefully planned preparation you do, the less likely it is that you will be "faked out" on the test.

2. Time Management

The unprepared student invariably mismanages his time during the SAT. He may spend an inordinate amount of time solving the more complex questions, thus never getting to some of the easier ones. The successful test taker is able to recognize a problem which he or she has no chance of answering and moves to the next question without hesitation. Also, when a student is answering a question and realizes that the solution requires complex computation, he or she should move on to the next question and return to the complex one later on.

By practicing on timed, practice tests like those in the **Practice Tests Module**, you will increase your ability to answer SAT questions in the most time-efficient manner.

3. "Guessing Factor Confusion"

To guess or not to guess??? When is guessing not guessing? When is it to your advantage to guess? What is the difference between an educated and a wild guess?

To answer these and other guessing questions in a way that will increase your score, you must bear in mind that points on the SAT are deducted for wrong answers. Specifically:

A. If a student answers a question correctly on the SAT, he earns one raw score point.

B. If a student does not attempt a question, that unanswered question produces absolutely no change in the student's raw score.

C. But . . . if a student answers a question incorrectly, he receives a penalty of ¼ point which is deducted from his raw score.

For example, if a student were to take a 30-question section of the SAT and answer 14 questions correctly, leave out 10 questions, and answer 6 questions incorrectly, he would receive a raw score of 12½ points ($14 - 0 - (¼ \times 6) = 12½$).

The uninformed student might think, then, that it is to his advantage not to guess at all, thereby avoiding those ¼ point penalties. However, the informed student knows that guessing will work to his advantage when that guess is an educated one.

Suppose a student is answering a question and has narrowed the possibilities to either choice A or choice C. The student is confident that choices B, D and E are incorrect, but has no way of choosing between A and C. Now is the time to guess because there is a 50% chance of being correct. If the student guesses in six such situations, the most likely outcome is that three questions will be answered correctly (+3 raw score points) and three will be answered incorrectly ($-\frac{3}{4}$ raw score points) for a net gain in score of $2\frac{1}{4}$ raw score points.

These raw score points could translate to as many as 25 College Board points — the difference between a 540 and a 565 score on either section of the exam.

Even if you can eliminate only two choices for an answer, guessing still provides you with a statistical advantage, though a much smaller one.

4. Self-Conscious Panic

The experienced test taker is not upset by being nervous. He realizes that such nervousness is inevitable, that just as a successful athlete is nervous before and during an important game, so too is the successful test taker.

While the unprepared test taker's nervousness gives rise to tense self-consciousness when he sees two or three consecutive problems he cannot answer, and degenerates from there to outright panic when his peripheral vision reveals that the student sitting next to him is turning to the second page while he is only halfway through the first, these meaningless distractions should not affect you. Rather, your previous practice and preparation will enable you to channel the nervous energy which inevitably accompanies the taker of an important test into the rapid execution of strategies which your practice has shown will maximize your score.

Similarly, in the weeks or months before the SAT, you may experience bouts of the pre-test jitters. Rather than sit around worried about being worried, regard a case of jitters as a reminder from yourself to yourself that you could be spending that period of time doing some additional practice. Take out your Hayden System discs, boot them up, and do some test problems. The more thorough your preparation, the more thoroughly you will conquer the fear factor.

YOUR SAT TIMETABLE

How much time left before you take the SAT? Ten weeks? Eight weeks? Six weeks?

Let us assume that you have six weeks before you take the SAT. Make an SAT timetable for yourself as this student did.

	SUN	MON	TUES	WED	THURS	FRI	SAT
Week 1	OPEN HAYDEN SYSTEM	6-8 PM PRE TEST		6:45-8:45 PM GENERAL	1 HR. ANALOGY		8-10 AM QUANT. COMP.
Week 2	FRIENDS 2 HRS.		7-8 AM READ. COMP.	6:45-8:45 PM GENERAL			8-10 AM PRACTICE TEST
Week 3		7-8:30 PM ANTON.		6:45-8:45 PM GENERAL	1 HR. SENT. COMP.		8-10 AM GEOMETRY
Week 4	FRIENDS 2 HRS.		7-8 AM READ. COMP.	6:45-8:45 PM GENERAL			8-10 AM PRACTICE TEST
Week 5		7-8:30 PM QUANT. COMP.		6:45-8:45 PM GENERAL	1 HR. ANALOGY		8-10 AM ALGEBRA SENT. COMP.
Week 6	FRIENDS 2 HRS.		7-8 AM ANTON.	6:45-8:45 PM PRAC. TEST	1 HR. GENERAL	1 HR. GENERAL "GET READY"	********** *SAT* **********

Examine this student's six-week timetable closely.

We strongly recommend that you develop a similar one for your test preparation. It is a critical part of your efforts to maximize your SAT scores.

The above student's schedule is neither too full nor too sparce. It has a number of excellent features which you may wish to incorporate into your own schedule:

— One evening, Wednesday, is set aside as SAT night. (This student avoided Thursday since many teachers give tests or quizzes on Friday.) Pick one day of the week as your SAT night — the backbone of your preparation program.

— Friday is always an off night. You really must give yourself a break.

— This student enjoyed getting up early Saturday (when everyone else was asleep) and putting in a solid two hours of preparation.

— Several days were set aside for Verbal Test work, even though the Verbal section of the test was this student's strong area. (If it's good, make it better.)

— Several Sundays were set aside as "buddy" nights. Sometimes two heads (or three heads) are better than one. If you find that working with a friend is more of a distraction than a help, discontinue the "buddy" night.

— Several evenings are left without SAT preparation assignments. If you miss a particular evening's preparation because of illness or other unforeseen reasons you must reschedule that time to one of the empty evenings. The unassigned days also give you an opportunity to add additional preparation time as you see fit.

When you make your own timetable, remember to:

Be realistic! Do not set up a schedule which is too difficult to keep.

Be flexible! Allow for family and health situations which keep you from following your schedule.

Be serious! Setting up a schedule benefits you most when you adhere to it closely.

Practice Testing

Our model timetable suggests you take a practice SAT at least every other week. Because the Hayden Practice Tests are timed, they accurately simulate the conditions under which you will be tested and provide a realistic testing ground for the new time management techniques you have developed.

As you move from Practice Test to Practice Test, you may notice that two weeks of your best effort produces less dramatic results than would result from two weeks of similar, concentrated work on one of your high school subjects. Do not worry. The SAT is not Mr. Smith's weekly spelling test. The sophisticated test taker, and you are becoming a more sophisticated test taker every time you use the HAYDEN SCORE IMPROVEMENT SYSTEM, is not bothered in the least when four weeks of intensive study produce "only" a 10 or 15 point improvement in raw score. Rather, the sophisticated test taker knows that even a 10 point raw score improvement will:

1. Increase his or her SAT Math score from 520 to 620 and,

2. Move him or her ahead of 80,000 other students nationally.

As you monitor your progress, bear in mind that every single point by which you can increase your raw score will increase your College Board score by seven to ten points and move you ahead of 10,000 other college applicants.

THE VERBAL SECTION

There are four parts of the SAT which determine your Verbal score. They are:

1. The Antonym Question
2. The Analogy Question
3. The Sentence Completion Question
4. The Reading Comprehension Question

NOTE: The Test of Standard Written English is not scored as part of the SAT Verbal score. The results of this portion of the test are used by the colleges and universities to place you in the appropriate freshman composition course sequence.

Here are some tips for each of the four types of Verbal questions.

The Antonym Question

A. Be aware that words which vaguely resemble in meaning the given word (but not exact synonyms) are sometimes placed as choices. The unprepared student will see this choice and, without thinking, choose it as the answer. This is a common error. Remember: you are looking for the antonym, the opposite meaning.

B. If the given word is a noun, the antonym will be a noun. The same is true for all parts of speech. If the given word is one part of speech, eliminate all answers which change the part of speech of the given word.

C. Be sure that you choose the antonym which is "most" correct. If the given word is "loathe" and two choices are "admire" and "adore", the latter, adore, is the "best" answer. Do you see why?

The Analogy Question

In the analogy question you are given two words which are related to each other in some way; i.e., doctor: scalpel. You are then given five pairs of words and asked to choose the pair which has the same relationship as the given pair. Some choices for the above comparison might be:

A. Medicine: Hospital
B. Nurse: Patient
C. Mason: Trowel
D. Pen: Novelist
E. Pilot: Aviation

The "best" answer and the correct one is letter C. Mason: Trowel.

Can you see why C is the correct answer?

A doctor uses a scalpel to perform some aspect of his trade. The scalpel is his tool. Likewise, the mason uses the trowel as his tool. Notice how each of the other answers are tempting (especially B and D) but are quite wrong. The nurse does not use the patient as a tool and the pen does not use the novelist as a tool. Notice how the test makers inverted the order of the choice in D. It's very tricky, very common on tests. Watch out for it!

To avoid temptingly deceptive answers, we suggest that you look at the given pair of related words and establish the relationship between the two words before you even look at the five pairs of possible choices.

Here are some common relationships often found in the analogy question.

1. Worker: Tool	Doctor: Scalpel Lumberjack: Chain Saw
2. Tool: Object Worked	Chisel: Statue Plow: Furrow
3. Male: Female	Ram: Ewe Gander: Goose
4. Object: Quality	Cow: Herbiverous Icicles: Brittle
5. Individual: Group	Soldier: Regiment Gorilla: Primates
6. Symbol: Value	Swastika: Nazism Heart: Love
7. Cause: Effect	Smoking: Cancer Earthquake: Tidal Wave
8. Word: Synonym	Loathe: Abhor Pulsing: Throbbing
9. Word: Antonym	Lethargic: Active Cognizant: Unaware
10. Degree or Amount: Greater Degree or Amount	Cold: Frigid Dime: Dollar

Remember, each of these ten relationships could be reversed. There are other relationships, more complex than the ones listed above. By doing simple analogies and the explanations for the answers, you will grow accustomed to these more difficult analogies.

The Sentence Completion Question

A. For the sentence with the single blank, you should try to fill in the blank with the word that makes sense without looking at the five possible answers. After you have thought of a word, look at the choices. If the word you thought of is not one of the choices, determine if it is a synonym of one of the choices. If it is, then choose it.

   Realize also that if the blank requires a word that is a particular part of speech, then the answer must be the same part of speech.

B. Your task for answering questions with two blanks can be trickier. Follow the same procedures as you did with the single blank question. Once you have chosen the possible answers (let us say A, D, E), for the first blank, move to the second blank and repeat the procedure. Remember: both words must be appropriate. Sometimes the first word in several pairs of possible answers is appropriate, but the second word is not.

The Reading Comprehension Question

There are a number of tactics that can be employed in bettering your effectiveness on the Reading Comprehension question.

First, you must become familiar with the common questions that are asked, so you can read with a purpose. Here are some common questions.

A. The title below that best expresses the ideas of this passage is. . .

B. The word which best describes the tone of the passage is. . .

C. As used in the passage, the word _____ most nearly means. . .

D. In writing this passage, the author's chief purpose was to. . .

E. The author's attitude toward the selection he describes is. . .

F. Which statement best illustrates the author's meaning?

We also suggest you read the questions before you read the passage. Do not read the choices. Do not memorize the questions. Read them again, then read the passage.

Reading the questions serves as an outline or preview of the passage. This reading gives you an idea as to what the passage is all about — a big advantage.

THE MATH SECTION

When you take the SAT, two of the six 30 minute sections will be Math sections. (One additional section may be Math; there are experimental sections in Math, Verbal or TSWE which are used to maintain quality and are not counted toward your score. However, you are not informed which sections are experimental). While the math required to do these problems is not very advanced, (i.e., no trig identities or complicated volume formulas) the SAT will require you to use the basics from arithmetic, algebra and geometry in new and sometimes tricky ways. Moreover, you will find that the test imposes severe time limitations on your efforts.

You have three main goals in preparing for the Math portion of the SAT.

1. Master as much of the required material as possible.

2. Practice using this material on the types of questions which appear on the SAT.

3. Learn to cope with the time pressure.

As you use your HAYDEN SCORE IMPROVEMENT SYSTEM to prepare for the SAT, keep track of any unfamiliar facts you need to know to answer the questions. If a test question refers to a rhombus but you do not know what a rhombus is, find out what it is and write the term and its definition in your notes. For each topic — arithmetic, algebra and geometry — keep a "fact" section of notes which you can study even without the computer. Learn these facts. Memorize them. At night, if you can't get to sleep but are not in the mood to do anything requiring much thought, review your "facts" lists. It's a lot better than doing nothing, and these facts are the tools you will need to build a higher Math score.

How To Practice For The Kinds Of Questions The Test Will Ask

"Familiarity Breeds Ability." Practice.

Use the Hayden materials you have bought. Whenever you have a chance, load the material in your computer and practice. Refer to your "facts" lists as you work. Do not hesitate to copy problems (with solutions) into your notes.

When you are unable to use the computer, or when you just want a change of pace, quiz yourself with questions from your notes. For these quizzes, many people find it helpful to make a series of flash cards — questions and choices on one side, correct answers and method of solution on the other. For the math, you should strive to memorize not just the right answers but the proper methods of solution.

While the chances that an SAT question will be identical to one in your notes are very low, the chances of your being required to employ the same or similar methods of solution are very high.

Learning To Cope With Time Pressures

It is important that you use the allotted time effectively when taking the SAT. Practice working in timed situations. Do not get bogged down on single problems; if you don't know it, skip it. Keep moving. Get the quick problems first, then return to try those problems whose solutions seem possible but lengthy. Only after you have completed the problems in these first two categories should you begin to consider any "impossible" problems.

As the **Practice Tests Module** contains timed tests and predictive exercises, they are particularly effective tools on which you can hone and practice your time-management techniques.

Multiple Choice Questions in Math: Distractors and Substitution

The multiple choice nature of the math sections of the SAT can either trick you or become an aspect of the test of which you can take advantage.

To avoid this "trick" aspect, beware of "distractors". While one of the five choices for each question is the right one, the others were not picked at random. Rather, a great deal of effort was spent constructing "likely" wrong answers; answers that are "close to right" or which reflect the most common mistakes.

Consider the sample question:

If $A = -2$ and $B = -3$, then $AB^2 = \ldots$

While the answer 36 is wrong, it would almost certainly be included among the choices to specifically "distract" and trap those students who erroneously multiply (-3) by (-2) before raising to the second power. (The correct answer is -18.)

Remember, if the answer you work out is included in the possible choices, it is not a guarantee that it is correct. If you get such an answer, but are unsure it is right, go ahead and make that choice, but plan to return to that problem if time permits.

A method which you can use to check many of your answers and, indeed, a method which will allow you to take advantage of the SAT's multiple choice format is the substitution method. This method simplifies certain algebra and geometry problems by substituting numbers for variables or algebraically expressed angles.

By using the substitution method on "impossible" problems you can often either:

1. Find the correct answer, or

2. Eliminate enough choices (at least 2 or, better, 3) so that you can guess with the odds in your favor.

To use the substitution method, substitute the prime numbers (2, 3, 5, 7, 11. . .) for the variables in problems like:

Which choice is "not" equal to: $\dfrac{A^2 - B^2}{-2C}$

(A) $\dfrac{(A+B)\ (B-A)}{2C}$

(B) $\dfrac{-(A^2-B^2)}{2C}$

(C) $\dfrac{B^2-A^2}{2C}$

Substitution ($A=2$, $B=3$, $C=5$) and evaluation show choice C to be correct. Similarly, if a question involves angles or elementary trig functions (sine, cosine, or tangent), substitution of the relevant values from the 30, 60, 90 right triangle can often show the correct answer or, at least, narrow the range of possibilities to two or three.

Give the substitution method a try as you practice. Not only can it help you find the right answer to an "impossible" problem, it will also illustrate and clarify the general methods of solution.

CONCLUSION

What do you do now? How many weeks are left? Begin by beginning!

Make a realistic timetable for yourself. Keep your goals realistic. Plan your work, and then work your plan.

Practice!

This booklet has outlined strategies you can use in planning your personal SAT strategy. To a large part, your success now depends on your effort and attitude. Keep your effort constant and your attitude positive.

You have at your disposal a powerful tool: the HAYDEN SCORE IMPROVEMENT SYSTEM FOR THE SAT. Its use will maximize the effectiveness of your efforts. Use it. Practice. Achieve.

APPENDIX A: Key to Pre-Test

Pre-Test
Section I
Time-30 Minutes
40 Questions

1. c
2. b
3. a
4. d
5. b
6. a
7. b
8. e
9. d
10. d
11. d
12. e
13. c
14. e
15. e
16. d
17. b
18. d
19. c
20. e
21. d
22. a
23. b
24. c
25. e
26. d
27. c
28. e
29. a
30. c
31. c
32. c
33. a
34. a
35. b
36. e
37. c
38. b
39. d
40. e

Pre-Test
Section II
Time-30 Minutes
25 Questions

1. c
2. a
3. d
4. e
5. e
6. a
7. c
8. b
9. d
10. e
11. d
12. d
13. a
14. a
15. c
16. a
17. b
18. a
19. e
20. d
21. b
22. c
23. b
24. b
25. a

Pre-Test
Section III
Time-30 Minutes
45 Questions

1. c
2. a
3. b
4. b
5. b
6. c
7. b
8. b
9. c
10. b
11. e
12. b
13. a
14. d
15. a
16. c
17. c
18. e
19. c
20. c
21. a
22. b
23. a
24. c
25. d
26. d
27. e
28. d
29. a
30. d
31. b
32. b
33. a
34. e
35. c
36. a
37. a
38. d
39. b
40. c
41. e
42. b
43. a
44. c
45. e

Pre-Test
Section IV
Time-30 Minutes
35 Questions

1. b
2. a
3. c
4. e
5. b
6. d
7. b
8. a
9. c
10. d
11. b
12. c
13. a
14. b
15. d
16. c
17. c
18. b
19. a
20. b
21. b
22. b
23. a
24. c
25. b
26. c
27. c
28. c
29. b
30. e
31. d
32. e
33. a
34. c
35. a

APPENDIX B: Answer Key to Practice Test #1

Practice Test #1
Section I
Time-30 Minutes
40 Questions

1. c
2. d
3. e
4. a
5. c
6. b
7. a
8. b
9. b
10. b
11. d
12. b
13. b
14. c
15. d
16. a
17. e
18. d
19. e
20. a
21. b
22. d
23. e
24. d
25. e
26. a
27. e
28. b
29. c
30. d
31. a
32. b
33. d
34. e
35. b
36. b
37. b
38. e
39. b
40. d

Practice Test #1
Section II
Time-30 Minutes
25 Questions

1. d
2. e
3. b
4. b
5. c
6. d
7. c
8. a
9. a
10. d
11. d
12. d
13. e
14. c
15. a
16. c
17. d
18. a
19. b
20. a
21. d
22. b
23. b
24. c
25. c

Practice Test #1
Section III
Time-30 Minutes
45 Questions

1. b
2. c
3. e
4. b
5. c
6. d
7. a
8. d
9. e
10. c
11. a
12. c
13. d
14. b
15. d
16. a
17. b
18. c
19. d
20. b
21. e
22. c
23. a
24. e
25. d
26. a
27. c
28. d
29. a
30. d
31. c
32. a
33. b
34. d
35. c
36. c
37. d
38. a
39. c
40. b
41. a
42. e
43. b
44. d
45. b

Practice Test #1
Section IV
Time-30 Minutes
35 Questions

1. b
2. a
3. d
4. a
5. e
6. c
7. e
8. a
9. c
10. a
11. c
12. b
13. c
14. c
15. b
16. c
17. d
18. a
19. c
20. b
21. a
22. a
23. c
24. a
25. b
26. c
27. b
28. c
29. b
30. d
31. d
32. e
33. c
34. a
35. a

APPENDIX C: Answer Key to Practice Test #2

Practice Test #2
Section I
Time-30 Minutes
45 Questions

1. e
2. b
3. c
4. a
5. d
6. e
7. b
8. e
9. d
10. a
11. d
12. c
13. d
14. b
15. d
16. a
17. a
18. d
19. c
20. b
21. e
22. c
23. d
24. a
25. c
26. c
27. e
28. e
29. a
30. b
31. c
32. a
33. d
34. c
35. c
36. c
37. c
38. e
39. d
40. c
41. d
42. d
43. e
44. d
45. b

Practice Test #2
Section II
Time-30 Minutes
25 Questions

1. a
2. c
3. c
4. a
5. d
6. e
7. b
8. d
9. d
10. b
11. e
12. d
13. b
14. a
15. b
16. a
17. e
18. c
19. a
20. d
21. d
22. b
23. e
24. c
25. a

Practice Test #2
Section III
Time-30 Minutes
40 Questions

1. a
2. b
3. d
4. e
5. b
6. b
7. b
8. e
9. b
10. d
11. d
12. d
13. a
14. b
15. d
16. e
17. c
18. e
19. e
20. b
21. e
22. b
23. c
24. a
25. e
26. e
27. a
28. b
29. c
30. d
31. d
32. e
33. d
34. d
35. c
36. a
37. d
38. c
39. b
40. c

Practice Test #2
Section IV
Time-30 Minutes
35 Questions

1. c
2. d
3. a
4. a
5. b
6. d
7. e
8. d
9. a
10. b
11. d
12. b
13. a
14. c
15. b
16. c
17. b
18. a
19. b
20. c
21. c
22. b
23. a
24. b
25. d
26. c
27. b
28. c
29. a
30. d
31. d
32. a
33. b
34. e
35. b

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